

Remarks

In the Office Action of August 27, 2003, the Examiner rejected claims 1-6 under Section 103(a) for obviousness over Mulier et al., U.S. Patent No. 6,096,037, in view of Schulze, U.S. Patent No. 6,443,970. Applicant respectfully requests that the application be reconsidered and allowed for the reasons explained below.

Brief Description of Claim 1 Changes

In response to the Examiner's rejection, and in light of the newly cited prior art, applicant has amended independent claim 1. Amended claim 1 is now directed to a combination ablation and visualization apparatus for ablating cardiac tissue of a patient. The apparatus comprises an elongated body including a first end and a second end opposite to the first end. First and second jaws are carried at the first end and are movable between a spaced apart open position and a closed position. Each jaw comprises an electrode for a connection to a terminal of an RF energy generator for ablating cardiac tissue located between the jaws. The apparatus further comprises a dissecting member carried by the jaws for separating adjoining cardiac tissues to obtain access to or visualization of a selected epicardial surface. More particularly, the dissecting member includes at least one aperture. A fluid pathway is in fluid communication with the aperture formed in the dissecting member. The fluid pathway extends along the body to the second end such that fluid may be introduced through the apparatus

to clear an operative field to enhance visualization for a site for ablation by the jaws. Dependent claims 2-9 depend directly or indirectly from amended claim 1, and therefore also include these features. New claim 9 is directed to an additional feature of the distal tip.

Claim 1 is Not Anticipated and Would Not Be Obvious in View of the Prior Art

Claim 1 was rejected based on the combination of Mulier '037 and Schulze '970. However, it is respectfully submitted that neither of these references teaches or suggests the invention, as recited in amended claim 1.

Mulier '037 discloses forceps 30 which include an elongated shaft 36 and jaws 38, 40 which are pivotable from a spaced apart open position and a closed position. In Figs. 3, each jaw 38, 40 includes a respective electrode strip 47, 49. Each electrode strip 47, 49 is further connected to a respective solution supply tube 52, 54 so as to supply electrolytic solution such as saline (col. 6, lines 46 - 47) to the respective jaw 38, 40. At col. 5, lines 25-37, openings 166 are formed in the jaw inner faces 164 to supply the electrolytic solution adjacent the tissue to be ablated (see Fig. 4). Electrical wires 56, 58 respectively connect to the solution supply tubes 52, 54 to electrically connect to the solution. During ablation, the solution flows out of the openings 166 of the jaw inner faces and is energized with electrical energy so as to assist ablation of the selected tissue site.

In contrast to amended claim 1, Mulier '037 does not include a dissecting member. At page 2 of the Office Action, the Examiner agrees that Mulier '037 does not teach or suggest a dissecting member. Therefore, it follows logically that Mulier '037 does not teach or suggest a dissecting member having the features as recited in amended claim 1.

Schulze '970 is relied upon in combination with Mulier '037 to provide the teaching of a dissecting member. Briefly, Schulze '970 discloses an electrosurgical clamping, coagulating and cutting instrument 8 which includes an upper jaw 42 and a lower jaw 44. The lower jaw 44 includes outer electrodes 34, 35 of the same polarity and an inner electrode, at edge 82 of the cutting element 70, having an opposite polarity. The lower jaw 44 further includes a V-shaped dissecting tip 50, as shown in Fig. 3 (col. 8, lines 39-42).

It is respectfully submitted that Schulze '970 would not render amended claim 1 obvious. The dissecting tip 50 shown in Schulze '970 fails to teach or suggest an aperture formed therein which is in fluid communication with a fluid pathway. Schulze's dissecting tip 50 includes a lower channel 52 which does not provide an aperture in fluid communication with a fluid pathway in any sense. Rather, the lower channel 52 provides for longitudinal movement of a cutting element 70, as seen in Figs. 4 and 5. The lower channel 52 is open along the entire inner face 164 of the jaw

and, as such, is entirely inadequate to teach or suggest the subject matter of amended claim 1. Clearly, the alleged combination of Mulier '037 and Schulze '970 would not render amended claim 1 obvious.

New Claim 9 Is Also Not Anticipated and Would Not Be Obvious in View of the Prior Art

New dependent claim 9 is also believed to be allowable on an independent basis in addition to the reasons discussed above. Claim 9 includes a plurality of apertures formed in the distal tip which are located in spaced relation around the circumference of the distal tip. Each aperture is in fluid communication with the fluid pathway. It is respectfully believed that neither of the cited references alone, or in combination with each other, teach or suggest the feature of claim 9.

Mulier '037 expressly teaches away from any openings which are not located in the jaw inner faces 164. Mulier '037 expressly requires that the openings 166 are formed in the jaw inner faces 164, as shown in Figs. 4 and 5, so as to supply electrolytic solution suitable for ablating the tissue adjacent the jaw inner faces. At col. 7, lines 13-19, Mulier '037 expressly teaches that openings at any other location than the jaw inner faces are considered to be unsuitable or ineffective. Accordingly, Mulier '037 would teach away from the subject matter recited in claim 9 in addition to the reasons discussed above. For this additional reason, claim 9 is believed to be independently allowable.

Amendments to Specification

Applicants have amended the application to include specific references to the U.S. patent application serial numbers of two co-pending U.S. applications to which the current application claims priority.

Conclusion

It is respectfully submitted that claims 1-9, as newly added or amended, clearly distinguish from the prior art references cited by the Examiner. Reconsideration and allowance of these claims are respectfully requested.

Respectfully submitted,

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